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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,839	05/09/2001	Binqiang Shi	B-3945 617918-2	3945

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EXAMINER	
SONG, MATTHEW J	

ART UNIT	PAPER NUMBER
1765	

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/851,839	SHI, BINQIANG	
	Examiner	Art Unit	
	Matthew J Song	1765	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 August 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *see continuation sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: *1-27,29-33,39 and 40*.

   Claim(s) withdrawn from consideration: *34-38*.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

NADINE G. NORTON
PRIMARY EXAMINER

Response to Arguments

Continuation of Item 5.

Applicant's arguments filed 8/29/2003 have been fully considered but they are not persuasive.

Applicant's arguments against the Pessa (US 4,876,218) reference, which is incorrectly referred to as Pressa, are noted but are not found persuasive. Applicant alleges that Pessa does not disclose a first layer substantially accommodates strain accumulated between the first crystal and the second crystal during epitaxial growth. Applicant basis for the allegation is that the first layer taught by Pessa, which is one atom layer thick, is not thick enough to substantially accommodate strain between the first crystal and the second crystal during epitaxial growth. However, Applicant would appear to be arguing that the first layer accommodates **all** of the strain, which is not claimed. In instant claims, the first layer substantially accommodates strain accumulated between the first crystal and the second crystal, which does not require all of the strain to be accommodated by the first layer. Applicant has admitted that the strain relief is distributed over all of the layers including the first layer, note pg 11, Final Paragraph. Therefore, the first layer does accommodate at least a portion of the strain between the first crystal and the second crystal and meets the limitations of the claim. Furthermore, applicant's instant specification teaches the first layer is tens of angstroms or **less** (pg 10, ln 6-14), which reads on a one atom layer thick first layer.

Applicant's allegation that the Examiner has failed to comply with 37 CFR 1.104 (d) (2) is noted but is not found persuasive. Applicant's **conclusion** that the position taken by the Examiner in the Final rejection is based on facts within the Examiner's own personal knowledge

is not correct. The final rejection is based on the interpretation of the reference by the Examiner, as stated previously. Therefore, the Applicant's **oral** request for an Affidavit is improper. Furthermore, the Examiner has never said or implied, "The invention is obvious and if you disagree, prove me wrong". The Examiner merely established a *prima facia* case of obviousness based on the teaching of Pessa, which shifts the burden of rebutting the *prima facia* case of obviousness to applicant. Applicant's have not show how Pessa first layer does not read on the instantly claimed first layer. Applicant's arguments have implied the first layer substantially accommodates **all** of the strain accumulated between the first crystal and the second crystal. Therefore, applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the first layer substantially accommodates **all** of the strain accumulated between the first crystal and the second crystal) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's argument regarding claim 6 are noted but are not found persuasive. Applicant alleges the '218 patent teaches the opposite of varying the thickness of a first layer, however this is not the case. The '218 patent teaches depositing a one atom thick layer, but is silent to re-evaporation. The Hayakawa teaches a method of growing a layer one atom layer at a time by re-evaporation. Pessa is open to other methods of forming a one atom thick layer, therefore the method of Hayakawa using re-evaporation is applicable.

NADINE G. NORTON
PRIMARY EXAMINER